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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,200	03/12/2004	Sang-Ki Jeong	8054-32 (LW9063US)	7422
22150 7590 01/18/2008 F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797			EXAMINER KUGEL, TIMOTHY J	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 01/18/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/799,200	Applicant(s) JEONG ET AL.	
	Examiner Timothy J. Kugel	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 14-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 32 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>02/01/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-32 are pending as filed on 12 March 2003. Claims 14-31 are withdrawn from consideration.

Election/Restrictions

2. Applicant's election of the invention of Group I, Claims 1-13 and 32 in the reply filed on 3 December 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)) and is therefore made **FINAL**.

Claims 14-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected election, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3 December 2007.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

3. Receipt is acknowledged of papers submitted under 35 USC 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement submitted on 1 February 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

Claim Objections

5. Claim 32 is objected to because of the following informalities: The term 'untraviolet' should be 'ultraviolet'. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 USC 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10, 13 and 32 are rejected under 35 USC 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the colored pigment.

Claim Rejections - 35 USC § 102 and/or 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 USC 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 8 and 32 are rejected under 35 USC 102(b) as being anticipated by US 5,662,794 (Sato hereinafter).

Sato teaches a color filter (Abstract and Column 1 Lines 21-31) comprising a layer of light-shielding resin composition on the front surface of a substrate (Column 2 Lines 54-60) wherein the light-shielding resin composition comprises mixture of a 10 to 95 weight percent of a binder resin with a monomer (Column 2 Lines 36-44, Column 3 Line 42 – Column 4 Line 3 and Example 1 Column 10 Lines 35-56); red, blue, green or black pigments, or mixtures thereof (Column 1 Lines 21-31 and Column 7 Line 64 – Column 8 Line 27) and optionally containing a surfactant—which would act as a dispersant—and a solvent (Column 8 Lines 40-42, Column 9 Lines 47-51 and Formulation C1 Column 11 Lines 12-30).

8. Claims 1, 3, 4, 7, 8 and 32 are rejected under 35 USC 102(b) as being anticipated by US 3,821,155 (Kloos hereinafter).

Kloos teaches compositions coated to a substrate (Abstract and Column 1 Lines 51-54) having viscosities of less than 10,000 cps at 25°C (Column 4 Lines 10-19) comprising 5-20 parts by weight of a curable film forming binder (Column 1 Lines 7-9)

that comprises a mixture of monomers (Column 5 Lines 30-45) which, as they cure would form the mixture of binder and monomer instantly claimed; 95-70 parts by weight of 35 to 70 weight percent sand coated with a curable epoxy resin and 25 to 50 weight percent black, red, blue or green pigments or mixtures thereof (Column 1 Lines 33-50, Column 2 Lines 14-45 and Column 4 Lines 42-48) wherein the pigments are dispersed into suitable vehicles such as dibutyl phthalate—which reads on the solvent instantly claimed—and a surfactant—which would act as a dispersant (Column 4 Lines 49-60).

The following is a quotation of 35 USC 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7 and 9 are rejected under 35 USC 102(b) as being anticipated by or, in the alternative, under 35 USC 103(a) as being unpatentable over Sato.

Sato teaches a color filter comprising a layer of light-shielding resin composition on the front surface of a substrate wherein the light-shielding resin composition comprises mixture of a 10 to 95 weight percent of a binder resin with a monomer; red, blue, green or black pigments, or mixtures thereof and optionally containing a surfactant—which would act as a dispersant—and a solvent as detailed above.

Pertaining specifically to claim 7, since Sato teaches the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the viscosity of the Sato composition would inherently be the same as

instantly claimed. If there is any difference between the product of Sato and the product of the instant claims the difference would have been minor and obvious.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 USC 102 and 103.

Claim 9 is viewed as a product-by-process claim and hence the method it is created by is not pertinent, unless applicant can show a different product is produced. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed Cir 1985).

"There is nothing inconsistent in concurrent rejections for obviousness under 35 USC 103 and for anticipation under 35 USC 102." See *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n4 (CCPA 1977).

10. Claim 9 is rejected under 35 USC 102(b) as being anticipated by or, in the alternative, under 35 USC 103(a) as being unpatentable over Kloos.

Kloos teaches compositions coated to a substrate having viscosities of less than 10,000 cps at 25°C comprising 5-20 parts by weight of a curable film forming binder that

comprises a mixture of monomers which, as they cure would form the mixture of binder and monomer instantly claimed; 95-70 parts by weight of 35 to 70 weight percent sand coated with a curable epoxy resin and 25 to 50 weight percent black, red, blue or green pigments or mixtures thereof wherein the pigments are dispersed into suitable vehicles such as dibutyl phthalate—which reads on the solvent instantly claimed—and a surfactant—which would act as a dispersant as detailed above.

Claim 9 is viewed as a product-by-process claim and hence the method it is created by is not pertinent, unless applicant can show a different product is produced. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." See *In re Thorpe*, 777 F2d 695, 698, 227 USPQ 964, 966 (Fed Cir 1985).

"There is nothing inconsistent in concurrent rejections for obviousness under 35 USC 103 and for anticipation under 35 USC 102." See *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n4 (CCPA 1977).

11. Claims 2, 5, 6 and 10-13 are rejected under 35 USC § 103(a) as being unpatentable over Kloos.

Kloos teaches compositions coated to a substrate having viscosities of less than 10,000 cps at 25°C comprising 5-20 parts by weight of a curable film forming binder that

comprises a mixture of monomers which, as they cure would form the mixture of binder and monomer instantly claimed; 95-70 parts by weight of 35 to 70 weight percent sand coated with a curable epoxy resin and 25 to 50 weight percent black, red, blue or green pigments or mixtures thereof wherein the pigments are dispersed into suitable vehicles such as dibutyl phthalate—which reads on the solvent instantly claimed—and a surfactant—which would act as a dispersant as detailed above.

While Kloos does not disclose expressly the ratio of the binder to monomer instantly claimed, as the monomers of the binder cured to solid polymer, one of ordinary skill in the art at the time the invention was made would have understood that all ratios—from 100% monomer to 100% polymer—would occur.

Further, while Kloos does not disclose expressly the percentage of solid powder—coated sand—in the binder or the percentage of pigment in the powder as instantly claimed, it would have been obvious to one of ordinary skill in the art at the time the invention was made that such percentages could be manipulated to achieve the predictable results of increasing or decreasing the intensity of the color in the composition.

It has been held that when the difference between a claimed invention and the prior art is the range or value of a particular variable, then a *prima facie* rejection is properly established when the difference in the range or value is minor. See *Titanium Metals Corp of Am v. Banner*, 778 F2d 775, 783, 227 USPQ 773, 779 (Fed Cir 1985).

Generally, differences in ranges will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such ranges is

critical. See *In re Boesch*, 617 F2d 272, 205 USPQ 215 (CCPA 1980). See *In re Aller*, 220 F2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). See *In re Hoeschele*, 406 F2d 1403, 160 USPQ 809 (CCPA 1969).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,278,009

Iida et al.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached 6:00 AM – 4:30 PM Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

/Timothy J. Kugel/
Patent Examiner, AU 1796